

ABSTRACT:

Presented is a system and method for converting or translating expressions in a natural language such as English into machine executable expressions in a formal language. This translation enables a transformation from the syntactic structures of a natural language into effective algebraic forms for further exact processing. The invention utilizes algorithms employing a reduction of sequences of terms defined over an extensible lexicon into formal syntactic and semantic structures. This term reduction incorporates both syntactic type and semantic context to achieve an effective formal representation and interpretation of the meaning conveyed by any natural language expression.